User manual

Digital HDTV DVB-T Receiver

ENGLISH

LC Mini DVB-T HD USB_engl.

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General instructions

Warranty

The period of warranty starts when buying the device. Please verify the exact date by sales check, delivery note, invoice, etc. Keep the documents carefully. Our warranty service refers to our warranty terms valid at the time of buying the apparatus.
In case you require technical service please take or send the device to your specialised dealer.

CE

The unit is labelled with the CE-sign and therefore conforms with the general requirements of the European guideline 2004/108/EG concerning electromagnetic compatibility and 2006/95/EG, electrical security.

Dumping hint for packaging

Any packaging material is recyclable and should principally be supplied to the recycling process.

Packaging and wrapping materials as plastic foils, etc. should never be available for children.

Safety Instructions

Before installing your digital receiver, all security and operating instructions should be read carefully. The User's Manual should be retained for future reference.
All operating and using instructions should be followed.
Never allow children to operate this electrical device without supervisor.

ENVIRONMENTAL CONDITIONS

Protect the receiver against humidity, heat and cold. Allow 10cm space around the receiver for sufficient ventilation. Do not cover the receiver's ventilation openings with items like newspapers, tablecloths, curtains, etc. .
Do not place any objects filled with liquids, such as vases, on the digital receiver.
Take care that no foreign bodies or liquids are getting into the device.
Do not expose the digital receiver to dripping or splashing liquids.

CONNECTING TO MAINS SUPPLY (SAFETY FEATURE!)

Only connect the original mains adapter to a well reachable mains supply socket 230V~ 50Hz only. Do not tilt, do not use disproportionate power and do not damage the receiver's power socket and its electrical connections when connecting the power cord. If the mains adapter should fail to fit, contact your supplier.

FAILURE

If the mains adapter or the power socket or its electrical connection is damaged, immediately unplug the mains adapter from the mains supply socket. Do not try to open or repair the mains adapter or the receiver on your own! Service must be carried out only by experts at a proper service centre.
If replacement parts are required, only original components are allowed to use. The use of unauthorised components may result in risk of fire and electric shock.

Cleaning and care

Before cleaning, unplug the device from the mains adapter.
For cleaning the casing, please use a soft, damp cloth. Do not use any washing-up liquids that affect the casing. Do not spray a cleaner towards the receiver

PLACEMENT

In touch with certain furniture surfaces it may happen that the receiver's feet may rub off. You should place the device on a proper underground that is stable and not easily inflammatory. Otherwise the receiver may fall and cause serious injury to people and serious damages to the device.
Do not use this product near water (e.g. bath tube, wash bowl, …).

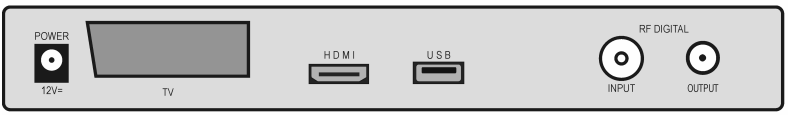
Control elements, front and rear panel

1 4-digit display (optionally) shows channel number
1a 2color LED shows ON/OFF status

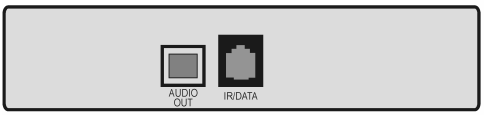
Display	***LED***	
-	red	Receiver in standby mode.
Channel number	green	Receiver is ON
rEC.		Timer activated

10 Smartcard reader (optionally)

1 1a 10



2 3 4 5 6 7



8 9

2 Connector for mains adapter 12VDC
3 TV-Scart port for connecting the TV
4 HDMI-Output (digital Audio- and Videosignal) for connecting the TV
5 USB-socket for external mass storage device (Option)
6 RF Input Digital – Socket for terrestrial signal
7 RF loop through Output

Left side

8 Optical Outputsocket for DOLBY DIGITAL-Signal.
9 RJ-11-Socket: Connection for an Infraredmouse and Interface for softwareupdate

Connecting the receiver

RF (HF) connection

Connect the RF Input Digital socket (6) of the receiver to your antenna socket.

Connecting a television

Use a scart cable to connect the TV socket (3) on the receiver to the corresponding scart socket on the television set.

HDMI output (4)
If your receiver is connected to the TV by a HDMI-cable, audio- and videosignal are digital.

Connecting a digital multi-channel amplifier (optional)

The receiver is optionally available with an AUDIO OUT socket (8) for a DOLBY DIGITAL signal. Use a suitable cable to connect this socket to your multi-channel amplifier.

Connecting an IR mouse (optional)

If you want to set up the receiver where it can't be seen, you can connect a so-called IR mouse to the RJ-11 socket (9). This must be positioned in such a way that it can receive the signals from the remote control. When installing the receiver, always be sure to follow the safety and installation instructions.

Connecting an external mass storage device (optional)

For recording of TV programmes, an external mass storage device can be connected to the optional USB-socket.

Connecting the mains adaptor

Connect the DC plug of the mains adaptor supplied with the unit to the socket DC-INPUT +12V (2) on the receiver.

How to insert batteries into the remote control

Open the cover at the rear side of the remote control.
Insert two AAA type batteries (1.5V).
Attention: Take care of appropriate +/- polarity!

Note:
If the operational range of the remote control is getting smaller, it indicates that the batteries are almost consumed. Always replace both batteries.
Caution:
Do not heat, disassemble or recharge the batteries.
Consumed batteries are not allowed to be disposed in domestic refuse. They must be supplied to a facility, collecting and disposing exhausted batteries according to the EU environmental protection rules.

Remote control

MUTE. Sound ON/OFF

0 … 9
Numeric input of channel numbers.
In Menu: Input of numeric parameters (frequency etc.)

EPG
Displays Electronic Programming Guide (EPG)

Displays Programm Info

◀▶
Volume control
In Menu: Change parameters or scroll lists

▲▼
Channel UP/DOWN
In Menu: selects menu lines

EXIT
Leave current menu or OSD (On Screen Display)

MENU
Activates main menu

CH Channel UP/DOWN

TEXT
Turns on Videotext

ON/OFF button

LIST
Shows list of stations

TV/R LIVE
Switches between RADIO- and TV-mode

OK
In menu: opens, confirms or modifies currently selected item

Activates last selected channel.

OPTION
Choice of audio-channels

F1 F2
Opens specified menus

VOL Volume control

GELB
Opens the information menu

ROT
In menu: Delete function

MODE
No function

If external mass storage devices are connected:

- Fast rewind
- Fast forward
- ARCHIVE Opens list of recordings
- Playback button
- Record button. Transfers EPG-date into record timer
- Stop button
- Pause button
- F1 F2 Setting and managing of markers
- GRÜN BLAU Renaming records

Initial installation

After reading the safety instructions (see chapter “safety instructions)” and finishing the actions explained in chapter “connecting the receiver” please use the supplied power cord for connecting the apparatus to the power supply. When running the receiver for the first time the “welcome menu” of the installation guide is displayed at the TV screen.
It helps you installing the most important settings.

Language of the menu

In the first step of the installation guide please select your language
by using ▲ or ▼ . Confirm your choice by **OK.**

Willkommen
Language [1/10]
Deutsch English Italiano Suomi Francais Čeština Türkçe

Country

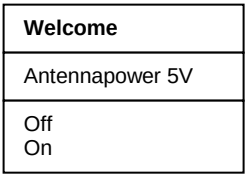
In the next step please select your country. Therefore press ▲ ▼ and then **OK**. If you want to get back to the language selection, you have to use the EXIT button.

NOTE: The choice of the country affects the the channel list sorting.

Welcome
Country [1/9]
Germany Austria Italy France Poland

Antenna current

In the final step of the installation assistant, use the buttons ▼or ▲ to select whether the antenna current for an active DVB-T indoor antenna should be switched on or off. Complete installation with **OK.**
You can make any corrections using the EXIT button



CAUTION:

The antenna current may be switched on only if the antenna really is an active indoor antenna with signal amplifier and is not already supplied with current through its own mains transformer (or similar). Otherwise this could cause a short circuit or destroy your antenna.

The menu for automatic channel search and the search process will be started. During the search the window shows Status: scanning. The newly found TV and radio programmes will be listed. Once the search is complete, the message Status: complete is shown. Use **EXIT** to leave the search menu.

Please note:

New programmes found by the channel search will be added to the beginning of the list of stations. You can set out the order of stations as you wish, and delete programmes you do not want.

Operating the receiver

Switching receiver ON/OFF

This receiver is optionally equipped with a low power standby circuit.
If this function is activated, the standby power consumption of the receiver is less than 1W.

The function is switched ON or OFF in the menu SETTINGS/RECEIVER SETUP.

- Low-Power Standby ON – Switching on the receiver takes about 10 seconds (Display: "boot").
- Low-Power Standby OFF – Receiver switches ON immediately.

You can switch on the receiver by pressing **OK**, ▲ ▼ or by using one of the numeric buttons **1…0**. The last activated channel will be displayed (e.g. 0015).

The digital receiver is switched into standby mode by pressing ⏻.

ATTENTION: Only by pulling the mains adapter the receiver is disconnected from the power supply completely.

TV & Radio mode

You can choose between the operation mode TV (viewing TV channels) and RADIO (listening to radio channels) by pressing **RADIO**.

Volume control & Muting

The volume level can be adjusted by pressing ◄ ► or ▲▼ . The corresponding scale is displayed on the screen.

Hint:

- It is not possible to change the volume level while the menu is active.
- The volume control only affects the audio output at the TV, VCR and AUDIO ANALOG OUT ports of the receiver.

By pressing the 🔇 button you can totally switch off the audio output (muting). For switching on again, simply use the same button.

Selecting a channel

1. **Using the directional up/down keys**
   To change the channels stepwise press the buttons ▲ ▼. In order to switch the channels quicker hold these buttons pressed longer.

2. **Using the numeric keys (direct input)**
   One or more digit channel numbers can be input by using the numeric buttons **0…9** and pressing **OK**. Not available channel numbers are ignored.

3. **Using the channel list**
   By pressing the LIST button the last activated channel list or favourite list is displayed. Browse the channel list by pressing ◄ ► or ▲ ▼ and activate the desired channel by pressing **OK**.

When pressing key **LIST** twice the following menu appears:

Select list
Favourites List Radio List TV List Alphabetic List

Favourites List: Your personal list of favourite channels
Radio List: List of stored Radio channels
TV List: List of stored TV channels
Alphabetic List: List of stored TV or RADIO channels in alphabetical order.

Choose the favoured list by pressing ▲ ▼ and activate it by pressing **OK**.

In alphabetic list mode the channels are sorted alphabetically. It helps you searching a certain channel. Therefore press **LIST** for displaying the alphabetic channel list and its char locator. Then enter the char locator menu by pressing **SWAP**. Use ▲ ▼ and ◄ ► for selecting the first letter of the searched channel and confirm by **OK**. If available the channel list shows the wished channel now.
For re-entering the channel list press **SWAP**, for activating the channel use **OK**.

4. Swap from current channel to the previous one:
Your receiver remembers the previous activated channel:
- By pressing **SWAP** you can switch from the current to the previous channel
- By pressing **SWAP** again switch back to the current channel

Every time you perform a channel change, the title and start/stop time of the current and the following programme are displayed in the channel change OSD (on screen display).
Thereby the scale of progression below the programme number signals the temporal progress of the current programme.

If faded out you can display this information again by pressing **OK**.

Settings

The basic functionality of the receiver is defined in the *Settings* menu.

Merely the derivation of your local time against the GMT (Greenwich Mean time) time needs to be corrected, otherwise the displayed times may be wrong.

Hint:
At each on screen display the possible user inputs are explained in the help bar at the lower screen brink.

By pressing ◄ and ► you can change the corresponding settings. When leaving a menu (**EXIT** button) you will be asked to store the performed modifications (Yes) or to keep the previous settings (No). Please choose one of these possibilities by pressing ▲ ▼ and confirm your choice by **OK**.

Turn on the receiver by pressing ⏻.
For entering the main menu, please press the **MENU** button.
The main menu is displayed:

Main menu
Settings
Installation
Channel list
Timer
Information
Mass Storage Device

Hint: „Mass Storage Device“ is only shown in the menu, if an external Mass Storage Device is connected at the USB-Socket (Option)

Press the **OK** button.
The following menu is displayed:
The first line *Receiver Setup* is marked.

Settings
Receiver Setup
Picture
Sound
Subtitle
OSD configuration
Parental Lock

Choose this menu item by pressing ▲▼ and confirm by **OK**.

Settings – Receiver setup

The following menu is displayed:

Receiver setup	
Time difference	+1.00 hrs.
Menu language	English
Initial volume	90%
HDMI Audio Bitstream	Off
Auto-Standby	On
Low-Power-Standby	On

1) Time difference
When operating the receiver for the first time you should set the derivation between your local time and the received GMT time (Greenwich Mean Time) by pressing ◄ or ►.
For Central Europe the following settings are recommended:

Winter time:	+1.00 hour
Summer time:	+2.00 hours

Note: This setting has to be updated at each summertime shift.

2) Menu language
Choose your language by pressing ◄ or ►.

3) Initial volume
The initial volume after a power reset of the receiver is adjusted here by pressing ◄ or ►.

4) HDMI Audio Bitstream
HDMI Audio Bitstream can be switched ON or OFF by pressing ◄ or ►.

5) Auto-Standby
If this function is activated (ON) and no button is pressed on the remote control for 3 hours, the receiver switches to Standby-Modus automatically.

6) Low-Power Standby
Low-Power Standby function can be switched ON or OFF by pressing ◄ or ►.

Settings – Picture

For entering the Picture menu, select menu item *Picture* in the *Settings* menu and press **OK**. The following menu appears:

Picture	
Scart output TV	RGB
Display format	4:3
Display adjustment	Letterbox
Picture scaling:	
>Input 720x576	Output 1920x1080
>Input 1280x720	Output 1920x1080
>Input 1920x1080	Output 1920x1080

1) SCART output TV
The video output at the SCART socket can be modified by pressing ◄ or ►. You can select among following options: *FBAS*, *RGB*, or *YUV*.

2) Display format
Use ◄ or ► for selecting the screen format of your TV set (4:3, 16:9).

3) Display adjustment
Use ◄ or ► for adjusting the video signal: pan & scan, letterbox, pillar box or centre.

4) Picture scaling
Here you can choose the picture resolution.

720 x 576
1280 x 720
1920 x 1080

a.) Television connected to Scart-Socket:

If your TV is only connected to the scart-socket of the receiver, you get the best picture quality, if you choose in the menu item „Picture scaling“ 720x576 for all output signals.

b.) Television connected to HDMI-Socket

If your TV is only connected to the HDMI-socket of the receiver, you get the best picture quality, if you choose in the menu item „Picture scaling“ Input signal = Output signal.

If you prefer fast channel switching, all output signals must be the same.

Press **EXIT** to leave this menu. For storing your modifications select **Yes** (◄ or ►), for keeping the previous settings select **No**.
Confirm your choice by pressing the **OK** button.

.

Settings – Sound

Sound	
Sound settings	Stereo
Sound channel TV	Stereo
Sound channel Dig.	uncompressed

1) Sound setting
Using ◄ or ► you can activate following audio modes: *Stereo*, *Mono left* or *Mono right.*

2) Sound channel TV
If the broadcasted programme offers different audio options you can select the desired audio output at the TV Scart by keys ◄/►.

3) Sound channel digital
If the broadcasted programme offers a digital audio channel, you can use ◄/► for selecting the audio signal that is to be output at the digital audio port.

Press **EXIT** to leave the menu. If you want to save your modifications choose **Yes**, for restoring the previous parameters choose **No** (keys ◄/►).
Confirm your choice by pressing the **OK** button.

Settings – Subtitle

Subtitle	
Subtitle	Off
Subtitle language	-

1) Subtitle
By using ◄/► you can activate/deactivate the display of DVB subtitles (if transmitted).

2) Language of the subtitle
To select the language of the subtitle you must use ◄ or ►. If there is no subtitle available this is indicated by "-".

Use **EXIT** to leave the menu. If you want to save the modifications choose **Yes**, for restoring the previous parameters choose **No** (keys ◄/►).
Confirm your choice by pressing the **OK** button.

Settings – OSD Configuration (Option)

For entering the OSD configuration menu, please select menu item *OSD configuration* in the *Settings* menu and press **OK**. The following menu appears:

OSD configuration	
Display time	5 s
OSD colour	blue

1) Display time:
By using ◄ or ► you can modify the display duration of the channel change graphics (1-10 seconds).

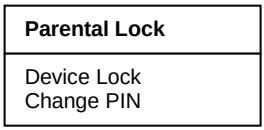
2) OSD colour:
You can choose the colour of the OSD display by pressing ◄ or ► .

Press **EXIT** to leave this menu. If you want to store your modifications select **Yes** by pressing ◄ or ►. For the restoring the previous settings you have to choose **No**.
Confirm your choice by using **OK**.

Settings – Parental lock

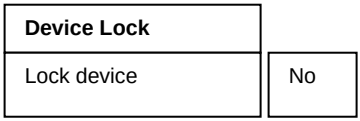
Your receiver is equipped with a parental lock. This secures the receiver against unauthorised use. When the parental lock is activated, the receiver can only be switched on after entering a 4-digit PIN code.

In the Main menu, use the ▲▼ buttons to move the cursor to the line *Parental lock* and press the ***OK*** button.



Parental lock – device lock

To activate or deactivate the device lock, move the cursor to the line *Device* lock and press **OK.** The following menu will appear:

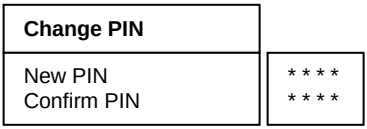


Use the ◄► buttons to switch the device lock on or of. When the lock is activated, the PIN code must be entered when switching on the receiver.

Press **EXIT** to leave the menu. Use the ◄► buttons to choose whether you want to store the changes made (Yes) or keep the previous settings (No). Confirm your choice with the **OK** button.

Parental Lock – changing the PIN

To change the PIN code, move the cursor to the line *Change Pin* and press **OK**. The following menu will appear:



The PIN code is set at the factory to *0000*. Using the code *9976*, the receiver can always be switched on, regardless of what PIN code has been set.

Use the ▲▼ buttons to move the cursor to the line *New PIN* and press the **OK** button. Use the **0-9** buttons to enter a 4 digit PIN code, the press **OK**. Use the ▼ button to move the cursor to the line *Confirm PIN* and press the **OK** button. Now confirm your entry by entering your chosen PIN code one more time, then press OK.
Press Exit to leave the menu. Use the ◄► buttons to choose whether you want to store the changes made (Yes) or keep the previous settings (No). Confirm your choice with the **OK** button.

WARNING
You must not forget the PIN code. Should this happen, please contact your specialist dealer!

Installation

In the main menu, select the line *Installation* using ▲▼ and confirm with **OK.** The Installation menu will appear:

Installation
Reception Channel search Factory reset

Use the buttons ▲▼ to make your selection and confirm with **OK.**

Installation – Reception

Move the cursor using ▲▼ to the line *Reception and confirm with* **OK**.

Reception	
Antenna power	Off

Here the antenna power can be switched on or off using the ◄► buttons.

CAUTION:

The antenna current may be switched on only if the antenna really is an active indoor antenna with signal amplifier and is not already supplied with current through its own mains transformer (or similar). Otherwise this could cause a short circuit or destroy your antenna.

The menu for automatic channel search and the search process will be started. During the search the window shows Status: scanning. The newly found TV and radio programmes will be listed. Once the search is complete, the message Status: complete is shown. Use **EXIT** to leave the search menu.

Installation – channel search

You can choose between automatic (antenna) and manual (transponder) channel search.
The automatic channel search checks the whole VHF and UHF range for programmes you can receive.

Automatic channel search

In the Installation menu, move the cursor using the buttons ▲▼ onto the line *Channel search* and press the **OK** button. The following menu will appear:

Channel search	
Antenna Search mode Encrypted	Terrestrial Automatically No

Start scan

Performing an automatic channel search

Select the line *Antenna* using ▲▼ and *Terrestrial* using the ◄ or ► buttons.
Select the line *Search mode* using ▲▼ and *Antenna* using the ◄ or ► buttons.
In the line *Encrypted,* select whether the channel search should also include encrypted channels, using the ◄ or ► buttons.
No = encrypted channels will be ignored.
Yes = encrypted channels will be included in the search.
Move the cursor onto the line *Start scan* using the ▲▼ buttons and start the search process by pressing the **OK** button.

Now two windows are shown, listing the newly found TV and radio programmes. The “Status” window shows how far the search has progressed.
- Display: *Scanning* => Search is active
- Display: *Complete* => Search is finished.

You can leave this menu by pressing **EXIT**. If not finished, the channel search algorithm is aborted. If new channels are found, you are asked to store them (**Yes**). Select your choice by ◄/► and confirm with **OK**. If selected YES the new channels are stored at the end of the channel list now.

Manual channel search

In manual channel search, you can enter the channels to be searched directly.
In the *Installation* menu, move the cursor using the buttons ▲▼ onto the line *Channel search* and press the **OK** button. The following menu will appear:

Channel search	
Antenna	Terrestrial
Search mode	Manually
Encrypted	No
Channel	7 (191.5MHz)

Start scan

This is how to perform a manual channel search:
Select the line *Antenna* using ▲ ▼ and *Terrestrial* using the ◄ or ► buttons.
Select the line *Search mode* using ▲ ▼ and *Transponder* using the ◄ or ► buttons.
In the line *Encrypted,* select whether the channel search should also include encrypted channels, using the ◄ or ► buttons.
No = encrypted channels will be ignored.
Yes = encrypted channels will be included in the search.

In the line *Frequency,* use the ◄ ► buttons to select the channel that should be searched.
Move the cursor onto the line *Start channel search* using the ▲ ▼ buttons and start the search process by pressing the OK button.
Now two windows are shown, listing the newly found TV and radio programmes. The “Status” window shows how far the search has progressed.
- Display: *Scanning* => Search is active
- Display: *Complete* => Search is finished.

You can leave this menu by pressing EXIT. If not finished, the channel search algorithm is aborted. If new channels are found, you are asked to store them (Yes). Select your choice by ◄/► and confirm with OK. If selected YES the new channels are stored at the end of the channel list now.

Installation – Factory reset

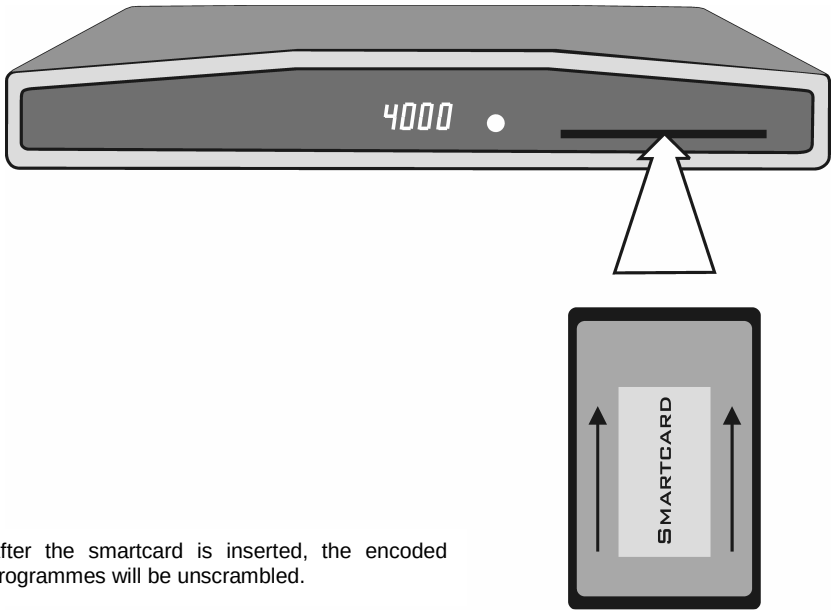
This menu item allows you to reset the receiver to its default factory status. Afterwards the receiver starts up with the Welcome Screen (initial installation) again.

Installation – Smartcard Reader (Option)

The Digital-Receiver is optionally equipped with a smartcard reader.

With an equal smartcard it is possible to unscramble encoded channels.

The smartcard can be inserted also while the receiver is switched on.
Insert the smartcard (golden chip on lower side towards the receiver) carefully into the slot at the front panel of the receiver.



After the smartcard is inserted, the encoded programmes will be unscrambled.

To open the menu of the smartcard, first select “Installation” in the main menu and press **OK** to confirm.

A submenu generated by the smartcard appears on the screen.

Select the submenu of the smartcard with ▲ or ▼ and press **OK** to confirm.
For more information on using the smartcard, see the menus shown or it´s instruction manual.

Installation
Reception Channel search Factory reset
Conax

Channel list

You can resort and/or erase TV and radio channels found in the course of an automatic channel search. This function is available for all TV and radio channels.

For entering the corresponding on screen dialog, please press the **Menu** key to enter the *Main Menu*, then select menu item *Channel List* and confirm with **OK**.

Following sub-menu appears:

Channel List
Edit main list Edit favourites list

Channel list – Edit main list

This sub-menu enables you to erase or move certain channels in the channel list. For entering this menu simply enter **OK** at line *Edit main list*.

a) Erase channels
Select the channel to be erased with ▲▼ and mark it with **OK.** You can select more channels by pressing ▲▼ and **OK**. To erase them press the **red button**.

b) Sort channels
Select the channel to be sorted by using ▲▼ and mark it with **OK**. You can select further channels by pressing ▲▼ and **OK** (max. 20 channels can be selected at the same time). Use ▲▼ to select the position where to insert the marked channels and confirm with the **yellow button.**

Channel list – Edit favourites list

This sub-menu allows you to add your favourite channels to the favourites list. Therefore please press **OK** in line *Edit favourites list*.

Now two lists are displayed:
- the Main list: all stored channels are listed (max. 4000).
- the favourites list: contains your favourite channels (max. 4000).

Now you can select your favourite channels from the Main list and copy them into the favourites list:
Select the channels you like to add to the favourites list by using ▲▼ and mark them with **OK.** Then press button **SWAP** to enter the favourites list. There use ▲▼ to select the position where to insert the channel and press **OK**. With **SWAP** you return to the main list again.

Use **EXIT** to leave the channel list menu. By pressing ◄► you can store your modifications (**Yes**) or keep the previous settings (**No**)**.** Confirm your choice by **OK**.

In radio mode you can create your own favourites list for radio programmes, too.

Timer

You can use the record timer functionality to programme a recording for a connected video recorder. Totally 10 record timers can be activated.
Or you can use the sleep timer to specify a time at which the receiver is to switch into standby mode.

Therefore please enter the *Main menu* by pressing **Menu**; then select menu item *Timer* and confirm with **OK**.

Timer
Record Timer Sleep Timer

Timer – record timer

Use ▲▼ to select line *Record timer* in menu *Timer* and press **OK**.
The following menu appears:

Record timer	
Timer index (1…30)	1 (inactive)
Start at	00:00 o´clock
Stop time	00:00 o´clock
Date of recording	01.03.10
Station	15 Eurosport
Repetitions	nothing

Programming a record timer:

1. Select line *Timer index (1...10)* with ▲▼
2. There select timer place with ◄ ►
3. Select lines *Start at* , *Stop time* or *date of recording* with using ▲▼ and confirm with **OK**
4. Enter the required time or date by pressing **0**-**9**
5. Confirm your input with using **OK**
6. Select line *Station* with ▲▼ and confirm with **OK**
7. Select a channel with ▲▼ or ◄ ► and confirm with **OK**.
8. Select line *Repetitions* with ▲▼ and use ◄ ► to specify the number of repetitions of this record.
9. Select line *Activate* and activate the programmed record timer by pressing **OK** there (text *Activate timer* changes to *Deactivate timer*).

The receiver will switch on at the programmed time and signals a timer record by displaying "**rEC.**" in the 4 digit LED Display. If you want to abort a record, please enter the record timer menu and deactivate the timer by pressing the *Deactivate* button.

If you push one of the buttons ▲▼ or ◄►, following menu appears:

Record active. Stop? Yes No

Choose „Yes" to stop the record or „No" to continue the record.
Hint: Please make sure that the local time of the receiver is set correctly and the video recorder is programmed, too.

Information

Enter the main menu, there use ▲ ▼ to select line *Information* and press **OK**.

In the upper section of the menu the channel parameters of the activated channel are displayed.
In the lower section of the menu the signal qualities are displayed.

- *Level*: The further the bar turns right the better the reception.
- *C/N*: The further the bar turns right and the higher the dB value, the better the signal quality.

Hint:
The power of the signal depends on the antenna set up and also on the currently activated channel. Please remember this if you want adjust your antenna by controlling the signal power.

After pressing the ◄ ► or the **yellow** button two further charts with channel, software and hardware information are displayed. With ▲▼ you can change the channel.

Use **EXIT** to leave this menu.

Videotext

Press the **TEXT** button to display the videotext of the current channel. The first site to be seen is site number “100“.

In order to view a specific page, use the buttons **0-9** to enter the three-digit page number. Your input is displayed in the left corner on the screen. When the site number is input completely the receiver starts to search the corresponding site. Because the video text sites are sent site by site it may take some seconds until the required site is found. Enter “100” at any time to return to the home page of the videotext.

You may use ▲▼ to quickly page through the complete videotext section of a particular TV channel.

If you press the **TEXT** button again you can switch into the mixed mode (background transparent). Use the **TEXT** button to return to the normal mode.

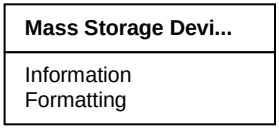
For leaving the video text please press **EXIT**.

Connection of external mass storage device (option)

If an external mass storage device is connected to the USB-Socket (option) on the rear side of the receiver, it can be managed in the menu “Mass Storage Device”.

Important: Before connecting or disconnecting the mass storage device, the receiver must be switched to Standby.

In the Main menu choose the line “Mass Storage Device” with ▲▼ and confirm with **OK**.
This menu will appear:

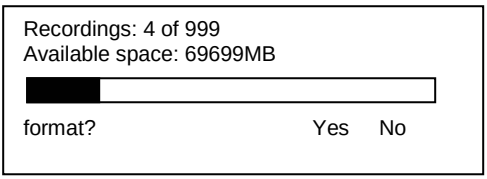


Information
Move the cursor using the buttons ▲ ▼ onto the line *Information* and press the **OK** button.
In the superimposed window you will see details about the connected mass storage device: Type, size, etc.

Use **EXIT** to leave this window

Formatting
Allows you to format the mass storage device. Formatting the mass storage device will completely delete all data which is recorded on it. Afterwards the full recording capacity will again be available.

In the menu *Mass Storage Device*, move the cursor using the buttons ▲ ▼ onto the line *Formatting* and then press the **OK** button



Use ◄► to choose whether you want to format the mass storage device (yes) or not (no). After formatting the number of recordings will be reset to zero. Available space shows the maximum recording capacity available on the mass storage device.
Use **EXIT** to leave the window.

Caution :
If you format the mass storage device, all recordings on it will be irretrievably lost.

List of recordings

In normal operation, press the **Archive** button to open up the list of recordings.

Deleting recordings

You can delete recordings you no longer need from the mass storage device.
Use ▲▼ to select the recording you wish to delete.
Then press the red button. A security question, asking whether you really want to delete the recording, will appear. Use the ◄► buttons to select whether you really want to delete the recording *(Yes)* or not *(No)*. Confirm your choice with the **OK** button.

Record list		
21.06.2010, 18:30, Sports		
1 2 3 4	Sports Newsflash Rainman Soccer	01:30:54 00:28:10 02:10:20 00:45:00

Sorting recordings
In normal operation press the **Archive** button to open up the list of recordings. Press the **LIST** button. The menu “Select list” will appear.
Use the ▲▼ buttons to select the sorting criteria and then press **OK**. The list of recordings will be sorted as follows:

“Alphabet”	The recordings will be put in alphabetical order
“Date of recording”	Sorted according to the date of the recording (newest recording first)
“Entry”	Sorted according to where the recording is filed on the mass storage device
“Recording length”	Sorted according to the size of the recording

Renaming records

While a recording is being made, it´s name will be formed automatically from the broadcast information. You can however rename the recordings manually.
In normal operating, press the **Archive** button. The list of recordings appears.
Use ▲▼ to select the programme you would like to rename.
Then press the blue button. This menu will appear:

Record list
21.06.2010, 18:30, Sports
Sports 0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ ] ! ? < > = _ - ; . # “ õ % & / ( ) = ^ ,

In the lower window you will see in the first line the name of the selected programme. Below it, available characters are shown. Use the green button to switch between capital and lower-case letters.
In the name, use the red and blue buttons to select the characters you wish to change. The current position that can be changed is highlighted in colour.
Now use the ▲▼ and ◄► buttons to select the character you would like to insert. Then press OK, to insert the character in the name.
To accept the new name press EXIT. The newly modified name will now be shown in the list of recordings.

Operating the external mass storage device (Option)

If an external mass storage device is connected to the USB-Socket (option) on the rear side of the receiver, you can store recordings on it.

The recording capacity depends on the size of the mass storage device and the data volume of the broadcast material.

Recording

Various modes of recording area available for you to record programmes onto the mass storage device.

1. Immediate recording
Switch on the channel you want to record.
Press the red **record** button to record the current programme. While the recording is running, the programme continues to be shown on the screen.
To stop an immediate recording, press the **stop** button.

2. Timer recording
You can record programmes onto a connected mass storage device in your absence using the Timer recording function. Programme a Time recording as described in the chapter " Timer".
Select the menu item *Record on the mass storage device*.

Select a channel during a record
During a record, all channels in the channel list which are in white colour can be seen.
Channels which are black, cannot be seen during a record.

The channel which is recorded, is marked with a red point in the channel list.

Timeshift function

The Timeshift function enables you to record and playback at the same time. This gives you various options:

1. Time-delayed television. You can watch the beginning of the recording and jump over recorded passages (e.g. commercial breaks).
   Press the **red record** button to start a timeshift recording.
   To watch the partially recorded programme, press the **Playback** button. The programme is then played from the moment of recording, while the current programme continues to be recorded in the background.
   If you want to stop the playback and return to normal TV operation, press the **Stop** button. To stop a timeshift recording press the **Stop** button.

2. Recordings saved on the mass storage device can be played during timeshift recording. During the timeshift recording, press the **Archive** button to open the list of recordings. Use ▲▼ to select the recording you wish to see. Press **OK** to start the playback. The playback information will be shown on the screen.
   If you want to stop the playback and return to normal TV operation, press the **Stop** button. To stop a timeshift recording press the **Stop** button.

Playback

In normal operation, press the **Archive** button to open the list of recordings. Use ▲▼ to select the recording you wish to see. Press **OK** to start the playback.

Playback is stopped using the **Stop** button.

Choosing the audio channel for recordings

When playing back recordings, you can choose between the different audio channels.

During playback, press the button **Option**. Now a menu with the available audio channels will be shown.
Use the ▲▼ buttons to select the audio channel you want to use and press the **OK** button. Pressing the **EXIT** button to hide the menu again.

Fast forward and rewind

During playback, press the **Fast Forward** button or the **Fast Rewind** button. The symbol "►►"or "◄◄" will appear, and the recording will be played faster in the desired direction. Press the **Fast Forward** or **Fast Rewind** button again to increase the speed. The symbols ►►► or ◄◄◄ will appear. Press the **Fast Forward** or **Fast Rewind** button once more, and the speed will be increased to the maximum. The symbols ►►►► or ◄◄◄◄ will appear. Once you have found the spot you were searching for, press the **Playback** button to return to normal playback operation.

During fast forward or rewind, you can use the ◄► buttons to change position within the file. This enables you easily to jump over longer sections of film.

Overview of symbols displayed:

Indication	**Meaning**
►	Playback
►►	Fast forward
►►►	Very fast forward
►►►►	Maximum speed forward
●	Record
●►	Timeshift operation
◄◄	Fast rewind
◄◄◄	Very fast rewind
◄◄◄◄	Maximum speed rewind

Operating the hard disk – setting and managing markers

During the timeshift function or playback, you can mark places on the recording. A marker is shown as a coloured triangle in the status indicator. Press the button **F1** at the playback position to set a marker.

You can use the button **F2** to show a list of all the markers. A recording always has the markers *Start* and *End*.

Using ▲ ▼ you can now select a single marker. Press the **OK** button to continue playback at the selected marker.

When the list of markers is open, you can use the button to assign a particular function to a marker, so that when playback reaches this marker the function is automatically performed.

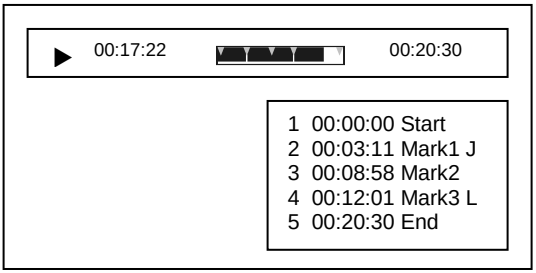
You can assign the following functions to markers:

- Press the button once – the marker is interpreted as a loop. When the playback reaches a loop marker, it jumps to the previous marker. A loop marker is labelled **L** in the list of markers. A yellow vertical line is shown in the status indicator.

- Press the button twice – the marker becomes a jump marker. When the playback reaches a jump marker, it jumps to the next marker. A jump marker is labelled **J** in the list of markers. A white vertical line is shown in the status indicator. Use jump markers, e.g. to jump over commercial breaks.

- Press the button three times – this marker has no special function, but can be used during playback as place for a loop or jump.

Press the **red** button to delete the selected marker from the list. The *Start* and *End* markers cannot be deleted.
Press the **F2** button or **EXIT** to close the list.



EPG – Electronic Programme Guide

Almost all TV and radio broadcasters provide further information on their programme. Your receiver stores and decodes these data and displays them in the so called Electronic Programme Guide (EPG).
This programme preview is activated by using the **EPG** button. The appearing list contains all programmes of the current channel.

With ▲▼ or ◄ ► you can select the programme you want to be informed about. You can get more detailed information by pressing **OK**.

Also you can use the EPG list to program a record timer very easily: Just press the **yellow button** and activate the record timer in the corresponding menu.

Please use **EXIT** to leave this on screen dialog.

Using serial interface

The serial data interface “DATA” offers you the possibility to connect the receiver to a PC. Therefore you need a PC and serial cable (On the PC-side a female SUB-D connector with 9 or 25 pins and on Receiver-side a RJ11 plug with 6 pins).
Via this connection you can perform software updates and channel lists up- and downloads. The required information and software tools are available at the manufacturer’s homepage.

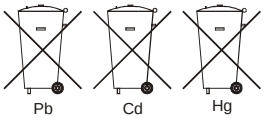
Make a contribution to environmental protection

Do not throw batteries into domestic waste. As a consumer you are obliged to return used batteries. You can bring them to a public collection station in your commune or elsewhere where batteries of the same type are sold.
The following signs can be found on batteries including harmful substances:

Pb = battery includes lead

Cd = battery includes cadmium

Hg = battery includes mercury



Hints for disposal

If your device is once disused you should not just throw it into domestic waste. Surely there is a collecting point for old devices where it can be collected and recycled.

Trouble-shooting

Every electric device can have a malfunction. It does not automatically mean that it is defective. In most cases it happens because of a feed cable, plug-and-socket connections or access mistakes. Please control the following items before taking the receiver to your specialised dealer:

Problem	**Possible causes**	**Help, Tips**
Receiver can not be turned ON	Mains adapter not connected to mains	Check if mains adapter is plugged in correctly. Try another electric device at the same power socket.
	Batteries of the remote control are not inserted / inserted faulty	Check batteries
No or bad picture	TV set is running on wrong channel	Check set up of the TV set
	Scart or HDMI cable is damaged or plugged in incorrectly	Replace or plug in the Scart or HDMI cable correctly
No audio	Volume is set too low	Increase volume
	Cable damaged or plugged in incorrectly	Check cable and ports
Remote control does not work	Distance to big	Come closer to receiver, point remote control directly towards receiver
	Batteries are exhausted or inserted incorrectly	Insert batteries correctly
	IR receiver is covered or not reachable by the IR signal	Remove barriers between remote control and receiver
	Timer is activated	Deactivate timer
Time is displayed wrongfully	Difference between local time and GMT is set incorrectly.	Enter menu *Receiver setup* and set time difference correctly
Timer is activated at the wrong time	Difference between local time and GMT is set incorrectly.	Enter menu *Receiver setup* and set time difference correctly
No picture, Channel change on screen graphic shows ”No valid signal!”	Cable is defect or plugged in incorrectly	Check cable and ports
	Channel has changed frequency	Perform channel search
	Incorrect Settings in menu „*Settings*“	Correct settings or restore the factory default status

Technical data

General	• 4000 channels • On screen video text and VBI video text
Fast-OSD	• quick channel change (zapping) • no delay at on screen graphic display • big type for better readability • concise help for all menus
EPG	• Electronic Programme (EPG)
Channel list editor	• copy, replace, delete • blockwise operations
Channel search	• automatic channel search • identification of encrypted channels • manual channel search
Further details	• Display for signal strength and quality • Separate audio output settings for SCART and Digital • SWAP function • DVB subtitling • DATA interface for updates and channel list transfer; updates available via website
Hardware	
CPU	• 32 bit RISC CPU
HDMI	• with Upscaler
Video	• 1 × SCART with FBAS, Y/C, YUV or RGB support • 16:9 signal
Audio	• Audio-DAC • Optical audio out • Volume control
Reception	• 174 – 862MHz (Band III, IV, V) • 7 or 8 MHz bandwidth switching •
Handling	• Remote control, rare panel control
Power requirement	• +12 Volt • Standby mode: Low-Power Standby ON <1W Low-Power Standby OFF about 4W
Batteries for remote control	• 2x1.5V (size AAA)
Surrounding temperature	• +5℃ to +40℃
Dimensions	• B x H x T: 230 x 35 x 140 mm
Weight	• Ca. 580g

Subject to change without prior notice. Errors in interpretation excepted.

595-00133